

# MMQ Market Profile Suite

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## Complete Parameter Documentation

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This document provides detailed explanations of all input parameters for the MMQ Market Profile Suite indicator. The indicator implements Market Profile analysis based on concepts from Jim Dalton's "Mind Over Markets," offering comprehensive TPO (Time Price Opportunity) visualization, volume analysis, and session-based profiling capabilities.

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# 1. Profile Mode Settings

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These parameters control how market profiles are calculated and displayed on the chart.

## Profile Mode

Type: Enumeration | Default: Period-Based

Determines the fundamental method for calculating and organizing market profiles. Four modes are available:

- **Period-Based:** Creates profiles based on fixed time periods (daily, weekly, monthly, or intraday intervals). This is the traditional approach for Market Profile analysis.
- **Session-Based:** Generates profiles for custom time sessions within each trading day. Useful for analyzing specific market sessions (e.g., Asian, London, New York sessions).
- **Anchor Start:** Creates a single continuous profile from a specified start date to the current time. Ideal for analyzing long-term price distribution from a significant market event.
- **Fixed Range:** Generates a profile for a specific date range defined by both start and end dates. Useful for analyzing historical periods or specific market events.

**Tip:** Use the Profile Mode Hotkey (default: M) to cycle through modes without reopening indicator settings.

## Profile Period

Type: Enumeration | Default: Daily

Specifies the time period for each profile when using Period-Based mode. Available options:

- **Monthly:** One profile per calendar month
- **Weekly:** One profile per week (Monday to Sunday)
- **Daily:** One profile per trading day (most common)
- **4 Hours:** One profile every 4 hours
- **1 Hour:** One profile every hour
- **30 Minutes:** One profile every 30 minutes
- **15 Minutes:** One profile every 15 minutes
- **5 Minutes:** One profile every 5 minutes

**Note:** This parameter is only active when Profile Mode is set to Period-Based. Shorter periods (5M, 15M, 30M) are useful for intraday scalping and day trading analysis.

## Anchor Start Date

Type: DateTime | Default: 0 (not set)

Defines the starting date and time for profile calculation in Anchor Start and Fixed Range modes.

- In **Anchor Start** mode: The profile begins at this date and extends continuously to the current time.
- In **Fixed Range** mode: This marks the beginning of the analysis period (must be used with Anchor End Date).

**Note:** A value of 0 means the parameter is not set. You must specify a valid date when using Anchor Start or Fixed Range modes.

## Anchor End Date

Type: DateTime | Default: 0 (not set)

Defines the ending date and time for profile calculation in Fixed Range mode only. This parameter is ignored in other modes.

The end date must be later than the Anchor Start Date to create a valid range. This mode is particularly useful for:

- Analyzing specific historical events (e.g., earnings releases, economic announcements)
- Comparing price distribution across different time periods
- Studying market behavior during specific market conditions

## 2. Session Settings

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Configure custom time sessions for Session-Based profile mode.

## Session 1 through Session 8

Type: String | Format: HH:MM-HH:MM

Define up to 8 custom time sessions per trading day. Each session is specified using 24-hour format with the pattern `HH:MM-HH:MM`.

### Default Values:

- Session 1: `00:00-08:00`
- Session 2: `08:00-16:00`
- Session 3: `16:00-24:00`
- Sessions 4-8: `00:00-00:00` (disabled)

### Usage Examples:

- Asian session: `00:00-09:00`
- London session: `08:00-16:00`
- New York session: `13:00-22:00`
- Overlap periods: `13:00-16:00` (London-NY overlap)

**Note:** Sessions with identical start and end times (e.g., `00:00-00:00`) are considered invalid and will be ignored. The end time must be later than the start time.

**Tip:** When using Session-Based color scheme, each session will be assigned its corresponding Session Color (1-8).

### Lookback Days for Session Mode

Type: Integer | Default: 5

Specifies how many trading days to analyze when using Session-Based mode.

- **Value > 0:** The indicator will analyze the specified number of trading days (excluding weekends and holidays based on available data).
- **Value = 0:** The indicator will use the "Number of Profiles" parameter instead, showing that many session profiles regardless of how many days they span.

For example, with 3 active sessions per day and Lookback Days = 5, you would see up to 15 profiles (5 days × 3 sessions).

**Note:** This parameter only applies to Session-Based mode. The indicator automatically skips non-trading days by using daily bar data.

## 3. General Settings

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Core parameters that control profile calculation and display behavior.



## Start Offset

Type: Integer | Default: 0

Determines how many periods to skip from the current time when displaying profiles.

- **0:** Start from the current/most recent period (default behavior)
- **1:** Skip the current period and start from the previous one
- **2:** Skip two periods, and so on

This is useful when you want to focus on completed profiles without the developing current period, or when analyzing historical patterns while excluding recent price action.

## Number of Profiles to Display

Type: Integer | Default: 7 | Range: 1-100

Controls how many market profiles are shown on the chart simultaneously. The indicator enforces a maximum limit of 100 profiles to maintain performance.

Considerations for choosing this value:

- **Lower values (3-7):** Cleaner chart, faster rendering, focus on recent price action
- **Medium values (10-20):** Good balance for swing trading and pattern recognition
- **Higher values (30-100):** Comprehensive historical view, useful for long-term analysis but may impact performance

**Note:** In Session-Based mode with Lookback Days set to 0, this parameter determines the total number of session profiles to display.

## Points per TPO Row

Type: Integer | Default: 16

Defines the price range (in points) that each TPO row represents. This is one of the most important parameters as it controls the granularity of your profile.

### Impact of different values:

- **Lower values (5-10):** Finer granularity, more detailed price distribution, taller profiles, better for ranging markets
- **Medium values (15-25):** Balanced view, suitable for most instruments and timeframes
- **Higher values (30-50+):** Coarser granularity, more compact profiles, better for volatile instruments or longer timeframes

**Tip:** For Forex pairs, typical values range from 10-20 points. For indices and stocks, adjust based on the instrument's average daily range and point value. Experiment to find what provides the clearest visual representation for your trading style.

### Hide Candles (Profile Only)

Type: Boolean | Default: True

When enabled, this parameter makes the chart candles transparent by setting their colors to match the background, creating a clean "profile-only" view.

#### Behavior:

- **True:** Candles, OHLC bars, and volume are hidden. Only the Market Profile visualization is visible.
- **False:** Normal candlestick chart is displayed alongside the Market Profile overlay.

The indicator automatically saves and restores your original chart settings when removed, so your chart appearance is preserved.

**Note:** This setting modifies chart properties temporarily. Your original chart colors and settings are restored when the indicator is removed from the chart.

## 4. Hotkey Configuration

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Customize keyboard shortcuts for rapid access to indicator features during live trading.

## Split View Hotkey

Type: String | Default: S

Toggle split view mode, which separates TPO letters by time period within each profile. This helps visualize how price distribution evolved throughout the profile period.

In split view, each time period (represented by a different letter) is displayed in its own column, making it easier to identify:

- Initial balance formation
- Range extension patterns
- Time-based price acceptance or rejection

## Hide TPO Profile Hotkey

Type: String | Default: H

Toggles the visibility of TPO letters and boxes while keeping other elements (Value Area, POC, Volume Profile, Statistics) visible.

Useful for:

- Decluttering the chart to focus on volume distribution
- Viewing only key levels (POC, VA) without the full TPO structure
- Combining with volume profile for a cleaner histogram view

## Show Hotkey Panel Hotkey

Type: String | Default: K

Displays or hides the hotkey reference panel, which shows all available keyboard shortcuts and their current states.

The panel appears as a modern, semi-transparent overlay in the bottom-right corner of the chart, providing quick reference without opening indicator settings.

## Stats Panel Cycle Hotkey

Type: String | Default: I

Cycles through statistics panel positions and visibility states:

- **Top:** Panel appears above each profile
- **Bottom:** Panel appears below each profile
- **Off:** Statistics panels are hidden

The statistics panel displays key metrics for each profile including POC, Value Area range, Initial Balance, volume, single prints count, and comparison with the previous profile.

## Profile Mode Cycle Hotkey

Type: String | Default: M

Cycles through all four profile modes without reopening indicator settings:

Period-Based → Session-Based → Anchor Start → Fixed Range → Period-Based

This allows rapid switching between different analysis perspectives during live trading. The chart automatically recalculates all profiles when the mode changes.

**Note:** Changing modes triggers a full recalculation, which may take a moment depending on the number of profiles and data volume.

## Draw Mode Hotkey

Type: String | Default: D

Activates interactive drawing mode, allowing you to create custom market profiles for any date range by clicking two points on the chart.

### Workflow:

1. Press the hotkey to enter draw mode (button appears on chart)
2. Click on the chart to set the profile start time
3. Click again to set the profile end time
4. The custom profile is created and displayed
5. Press the hotkey again to exit draw mode, or continue creating more profiles

Press ESC to cancel an in-progress drawing operation.

## Delete Last Drawn Profile Hotkey

Type: String | Default: X

Removes the most recently created custom profile from draw mode. This only affects profiles created via the interactive drawing feature, not the automatically generated profiles from Period/Session modes.

Useful for quickly correcting mistakes when manually drawing profile ranges.

## Volume Profile Hotkey

Type: String | Default: V

Cycles through volume profile display modes:

- **Off:** No volume histogram displayed
- **Total:** Shows total volume at each price level (single color)
- **Buy/Sell Split:** Shows separate buy and sell volume bars (green/red)

The buy/sell split is determined by comparing the close price to the open price for each bar, providing insight into buying vs. selling pressure at different price levels.

## Volume Position Hotkey

Type: String | Default: P

Cycles through volume profile positioning options:

- **Left:** Volume histogram appears on the left side of the profile (default)
- **Right:** Volume histogram appears on the right side, offset by the specified number of bars (useful for developing profiles)
- **Inside:** Volume histogram is drawn within the profile area, overlaying the TPO structure

**Tip:** The Right position is particularly useful for current/developing profiles, as it keeps the volume histogram visible even as new price bars form.

## 5. TPO Appearance

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Control the visual presentation of TPO letters on the chart.



## Font Size

Type: Integer | Default: 7

Sets the size of TPO letters in points. Typical values range from 6 to 10.

- **Smaller fonts (6-7):** More compact profiles, suitable for displaying many profiles or on smaller screens
- **Larger fonts (8-10):** Better readability, suitable for presentation or when focusing on fewer profiles

The optimal size depends on your screen resolution, chart zoom level, and personal preference.

## Font Name

Type: String | Default: Monospace

Specifies the font family for TPO letters. Monospace fonts are strongly recommended because they ensure consistent character width, which is essential for proper TPO alignment.

### Recommended fonts:

- Monospace (default)
- Courier New
- Consolas
- Lucida Console

**Note:** Using proportional fonts (like Arial or Times New Roman) will cause misalignment of TPO letters and is not recommended.

## Letter Spacing

Type: Integer | Default: 8 pixels

Controls the horizontal spacing between TPO letters in pixels. This affects the visual density and readability of the profile.

- **Lower values (5-7):** More compact, fits more letters horizontally
- **Higher values (9-12):** More spacing, easier to distinguish individual letters

Adjust this in combination with Font Size to achieve the desired visual appearance.

## Split View (Initial State)

Type: Boolean | Default: False

Determines whether split view mode is enabled when the indicator first loads. This can be toggled at any time using the Split View Hotkey.

- **False:** Standard view with all TPO letters merged (traditional Market Profile display)
- **True:** Split view with time periods separated into columns

## TPO Color

Type: Color | Default: White

Sets the color of the TPO letters themselves. This color is used for the text characters (A, B, C, etc.) that represent different time periods.

Choose a color that contrasts well with both your chart background and the TPO box colors for optimal readability.

## 6. TPO Box Settings

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Configure the colored boxes that appear behind TPO letters.

## Show TPO Boxes

Type: Boolean | Default: True

Enables or disables the colored boxes behind TPO letters.

- **True:** Colored boxes are displayed, making it easier to distinguish different time periods
- **False:** Only TPO letters are shown without background boxes (classic Market Profile style)

## Box Color Scheme

Type: Enumeration | Default: Sequential

Determines how colors are assigned to TPO boxes. Five schemes are available:

- **Sequential:** Smooth color progression around the color wheel (0-360 degrees). Creates a gradual rainbow effect across time periods.
- **Balanced:** Varied hues with consistent brightness. Completes the color wheel twice over 62 letters for more color variety while maintaining visual balance.
- **Alternating:** Maximum contrast between consecutive time periods using golden angle distribution (137.5°) and alternating lightness values. Best for distinguishing adjacent time periods.
- **Single Color:** All TPO boxes use the same color specified in "Box Single Color" parameter. Provides a uniform, minimalist appearance.
- **Session-Based:** Each session (in Session-Based mode) gets its own color from the Session Colors 1-8. Useful for visually separating different trading sessions.

**Tip:** For intraday analysis with multiple sessions, use Session-Based coloring. For single-profile analysis or cleaner appearance, use Single Color. For maximum visual distinction between time periods, use Alternating.

## Box Single Color

Type: Color | Default: Midnight Blue

The color used for all TPO boxes when Box Color Scheme is set to "Single Color". This parameter is ignored for other color schemes.

Choose a color that provides good contrast with your chart background while not being too bright or distracting.

## Box Transparency

Type: Integer | Default: 200 | Range: 0-255

Controls the transparency level of TPO boxes using alpha channel values:

- **0:** Completely transparent (invisible)
- **128:** 50% transparent (semi-transparent)
- **200:** Mostly opaque (default, good balance)
- **255:** Completely opaque (solid color)

Higher transparency values (closer to 255) make boxes more solid and visible. Lower values make them more subtle and allow underlying chart elements to show through.

### Box Gap / Padding

Type: Integer | Default: 1 pixel | Range: 0-3

Sets the spacing/gap around TPO boxes in pixels. This creates visual separation between adjacent boxes.

- **0:** No gap, boxes touch each other (most compact)
- **1-2:** Small gap, good visual separation (recommended)
- **3:** Larger gap, maximum separation

Larger gaps make individual time periods more distinct but reduce the overall density of the profile.

## 7. Session Colors

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Define colors for each session when using Session-Based color scheme.

## Session 1-8 Colors

Type: Color | Defaults: Various dark colors

Specifies the color for each of the 8 possible sessions when Box Color Scheme is set to "Session-Based".

### Default colors:

- Session 1: Dark Blue
- Session 2: Dark Green
- Session 3: Dark Red
- Session 4: Dark Orange
- Session 5: Dark Violet
- Session 6: Dark Cyan
- Session 7: Dark Goldenrod
- Session 8: Dark Magenta

These colors are applied to TPO boxes based on which session generated each time period. This creates a clear visual distinction between different trading sessions within the same day.

**Note:** These parameters only affect the display when Box Color Scheme is set to "Session-Based". They are ignored for other color schemes.

## 8. Value Area Settings

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Configure the calculation and display of Value Area and Point of Control.

## VA Percentage

Type: Double | Default: 70.0

Defines what percentage of the total TPO count should be contained within the Value Area. The standard Market Profile convention is 70%, representing the price range where 70% of the trading activity occurred.

The Value Area is calculated by:

1. Finding the Point of Control (price level with most TPOs)
2. Expanding up and down from the POC to include the specified percentage of total TPOs
3. Marking the Value Area High (VAH) and Value Area Low (VAL)

While 70% is traditional, you can adjust this value:

- **60-65%:** Narrower value area, focuses on core price acceptance
- **70%:** Standard Market Profile convention
- **75-80%:** Wider value area, includes more price extremes

## VA Background Color

Type: Color | Default: Gold

Sets the background color for the Value Area zone. This color fills the rectangular area between Value Area High and Value Area Low.

Choose a color that stands out against your chart background but doesn't obscure important price information. Warm colors like gold, yellow, or orange are traditional choices.



## VA Transparency

Type: Integer | Default: 45 | Range: 0-255

Controls the transparency of the Value Area background using alpha channel values:

- **0:** Completely transparent (invisible)
- **30-50:** Subtle highlighting (recommended range)
- **100-150:** Moderate visibility
- **255:** Completely opaque (solid color)

Lower values create a subtle highlight that doesn't dominate the chart. Higher values make the Value Area more prominent but may obscure underlying elements.

## POC Color

Type: Color | Default: Yellow

Sets the color of the Point of Control line. The POC is the price level with the highest TPO count (or volume in volume-weighted profiles), representing the price where the most trading activity occurred.

The POC is one of the most important reference levels in Market Profile analysis, often acting as support or resistance. Use a bright, contrasting color to make it easily identifiable.

### VAH/VAL Border Width

Type: Integer | Default: 2 pixels

Sets the width of the border lines marking Value Area High and Value Area Low. These lines define the upper and lower boundaries of the Value Area.

- **1 pixel:** Thin, subtle lines
- **2 pixels:** Standard visibility (recommended)
- **3-4 pixels:** Bold, highly visible lines

Thicker lines make VAH and VAL easier to spot at a glance, which is useful for quick reference during live trading.

## 9. Profile Borders & Initial Balance

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Configure profile boundaries and Initial Balance highlighting.

## Show Profile Borders

Type: Boolean | Default: True

Displays vertical lines at the start and end times of each profile, clearly delineating where one profile ends and another begins.

- **True:** Border lines are drawn, making profile boundaries explicit
- **False:** No border lines, profiles blend together visually

Borders are particularly useful when displaying multiple profiles to understand the time context of each profile.

## Border Color

Type: Color | Default: Silver

Sets the color of profile border lines. Choose a neutral color that provides clear separation without being too prominent.

## Border & IB Width

Type: Integer | Default: 1 pixel

Sets the width of both profile border lines and Initial Balance lines. This single parameter controls both elements for visual consistency.

- **1 pixel:** Subtle, minimal visual weight
- **2-3 pixels:** More prominent, easier to see

## Show Initial Balance

Type: Boolean | Default: True

Enables highlighting of the Initial Balance (IB) range. The Initial Balance represents the price range established during the first portion of the trading session and is a key concept in Market Profile analysis.

When enabled, the IB range is highlighted with a colored background, making it easy to identify and monitor price action relative to this important reference zone.

## IB Calculation Mode

Type: Enumeration | Default: First Hour

Determines how the Initial Balance range is calculated. Four methods are available:

- **First N Bars:** IB is the high-low range of the first N bars of the profile (N specified by "IB Period Bars" parameter). Useful for timeframe-independent analysis.
- **First Hour:** IB is the high-low range of the first 60 minutes of the profile. This is the traditional Market Profile approach for daily profiles.
- **First 30 Minutes:** IB is the high-low range of the first 30 minutes. Useful for more active markets or shorter-term analysis.
- **Disabled:** Initial Balance is not calculated or displayed.

**Tip:** For daily profiles, "First Hour" is standard. For intraday profiles (hourly, 30-minute), consider using "First N Bars" with 2-4 bars, or "First 30 Minutes" for time-based consistency.

### IB Period (Bars)

Type: Integer | Default: 2

Specifies the number of bars to use for Initial Balance calculation when IB Calculation Mode is set to "First N Bars".

This parameter is ignored for other IB calculation modes.

Typical values:

- **2 bars:** Quick IB formation, suitable for volatile markets
- **3-4 bars:** Balanced approach
- **5+ bars:** Longer IB period, more stable reference range

### IB Highlight Color

Type: Color | Default: Blue

Sets the color for the Initial Balance highlight zone. The IB range is drawn as a colored background between the IB high and IB low.

Choose a color that contrasts with the Value Area color for clear visual distinction between these two important zones.

## 10. Single Prints

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Configure the detection and display of single print price levels.

## Show Single Prints

Type: Boolean | Default: True

Enables the detection and visualization of single print levels. A single print is a price level that appears only once in the profile (represented by only one TPO letter).

Single prints are significant in Market Profile analysis because they often represent:

- Areas of price rejection or quick movement through a level
- Potential support or resistance when price returns to these levels
- Gaps in the profile structure that may be filled later

When enabled, single print levels are marked with small visual indicators on the chart.

## Marker Color

Type: Color | Default: Salmon

Sets the color of single print markers. These small indicators appear at price levels that contain only one TPO.

Choose a color that stands out against your chart background and TPO colors for easy identification.

## Marker Size

Type: Integer | Default: 2 pixels

Controls the size of single print markers. Larger markers are more visible but may clutter the chart if there are many single prints.

- **1-2 pixels:** Subtle markers, minimal visual impact
- **3-4 pixels:** More prominent, easier to spot
- **5+ pixels:** Very visible, may dominate the display

## 11. Volume Profile

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Configure the volume histogram display and analysis features.

## Buy Volume Color

Type: Color | Default: Green

Sets the color for buy volume bars when the volume profile is in "Buy/Sell Split" mode.

Buy volume is determined by bars where the close price is higher than the open price, indicating bullish price action at that level.

## Sell Volume Color

Type: Color | Default: Crimson

Sets the color for sell volume bars when the volume profile is in "Buy/Sell Split" mode.

Sell volume is determined by bars where the close price is lower than or equal to the open price, indicating bearish price action at that level.

## Total Volume Color

Type: Color | Default: Dim Gray

Sets the color for volume bars when the volume profile is in "Total" mode (not split by buy/sell).

This mode shows the aggregate volume at each price level without distinguishing between buying and selling pressure.



## Volume Transparency

Type: Integer | Default: 50 | Range: 0-255

Controls the transparency of volume histogram bars using alpha channel values:

- **0:** Completely transparent (invisible)
- **30-70:** Semi-transparent, allows underlying elements to show through (recommended)
- **150-200:** Mostly opaque
- **255:** Completely solid

Moderate transparency (40-60) works well for overlaying volume on the profile without obscuring TPO letters or other elements.

## Max Histogram Width

Type: Integer | Default: 50 | Range: 10-100

Sets the maximum width of the volume histogram as a percentage of the profile width. The longest volume bar (highest volume level) will extend to this percentage, and all other bars are scaled proportionally.

- **20-30%:** Compact histogram, minimal space usage
- **40-60%:** Balanced size (recommended)
- **70-100%:** Large histogram, maximum detail but may overlap with adjacent profiles

Adjust this based on how many profiles you're displaying and how much emphasis you want to place on volume analysis.

## Right Position Offset (Bars)

Type: Integer | Default: 10

Specifies the horizontal offset in bars when the volume profile is positioned on the right side (using the Volume Position Hotkey).

This offset pushes the volume histogram to the right of the profile end time, which is particularly useful for:

- Current/developing profiles where new bars are still forming
- Keeping the volume histogram visible and not overlapping with new price action
- Creating visual separation between the profile and its volume distribution

Typical values range from 5 to 20 bars depending on your chart timeframe and zoom level.

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## MMQ Market Profile Suite

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For support and updates, please refer to the documentation and video tutorial.